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NEPC Review: Playing to Type? Mapping the Charter School Landscape

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Summary of Review

This review provides a brief description and overview of a new study that looks at specific charter school types. A unique typology is developed and then used to compare charter schools types by their enrollment, demographic background of students, and performance. This review identifies and explains a number of limitations in the study in terms of design, methods, and sources of data. While a substantial and commendable effort was put into developing the typology and placing schools within it, less effort and rigor were used in analyzing the differences between the school types. Because no comparisons are made with traditional public schools, the study provides little relevant information that could inform policy in the area. The study is criticized for including false claims to the effect that it is the first charter-school typology and the first to compare different types of charter schools on standardized tests performance. Finally, the review identifies major weaknesses in the study’s reporting of statistical findings. Because the use of typologies can further our understanding of charter schools, it is recommended that the author as well as the sponsor of the study further develop and expand the analyses based on this and other possible typologies.
I. INTRODUCTION
The body of research on charter schools has increasingly considered and emphasized that large differences exist among charter schools, both within and between states. Researchers and policy analysts—not least Ted Kolderie—have long argued that we need to be careful in generalizing about charter schools. After all, each charter school is unique and distinct and should be judged primarily according to its charter contract. The study being reviewed reminds us of the importance of not generalizing across charter schools, but also highlights how valuable and revealing it can be to analyze subgroups of charter schools that share common models and approaches.

Over the past decade, the body of research and writing on charter schools has shifted from being largely rhetorical in nature toward being increasingly empirical. The research and evaluations that have examined the performance of charter schools in terms of student performance also have improved as the quantity and the quality of available data have improved. This study provides an interesting typology, but when we place it among the larger body of research, we see that while it is not rhetorical in nature, it is certainly undermined by not taking advantage of the increasing availability of data regarding student achievement.

In terms of performance, the growing body of research indicates that although charter schools can be successful in some settings, on the whole they perform similar to or slightly worse than comparable traditional public schools. A study such as this one could have explored whether certain types of charter schools perform better or worse relative to traditional public schools. Such insights would provide policymakers with information on school types that should be emulated. This particular study, however, makes no comparisons with traditional public schools. Instead all the comparisons that are made are between differing types of charter schools. Moreover, the differences highlighted in the report are either obvious or of limited value to policymakers since they do not show how different types of charter schools perform relative to traditional public schools. As a first draft of an idea that can be refined and developed, the study has some promise.

II. CONCLUSIONS AND FINDINGS
A total of 55 school types were initially identified. For the purpose of the study, these were grouped into five broad categories (traditional, progressive, vocational, general, and alternative delivery). These five categories were further distinguished depending on whether they had open enrollment or were serving targeted student populations. With the five categories multiplied by the two enrollment categories, there is a total of ten distinct school types. Table 1 provides an illustration of the breakout of the ten categories and also contains data that describe the distribution of each school type across the 5 states considered in the study (Arizona, California, Florida, Michigan, and Texas). These states were selected since they were the largest charter schools states in 2001-2002 and accounted for a considerable proportion of the nation’s charter schools.
Table 1. Charter school typology and school distribution (N=1,163 schools)

<table>
<thead>
<tr>
<th>Type</th>
<th>Open Enrollment</th>
<th>Targeted Student Population</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>260 (22.4%)</td>
<td>8 (0.7%)</td>
<td>268 (23.1%)</td>
</tr>
<tr>
<td>Progressive</td>
<td>329 (28.3%)</td>
<td>8 (0.7%)</td>
<td>337 (29.0%)</td>
</tr>
<tr>
<td>Vocational</td>
<td>50 (4.3%)</td>
<td>93 (8.0%)</td>
<td>143 (12.3%)</td>
</tr>
<tr>
<td>General</td>
<td>153 (13.2%)</td>
<td>189 (16.3%)</td>
<td>342 (29.4%)</td>
</tr>
<tr>
<td>Alternative Delivery</td>
<td>69 (5.9%)</td>
<td>4 (0.3%)</td>
<td>73 (6.3%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>861 (74.0%)</strong></td>
<td><strong>302 (26.0%)</strong></td>
<td><strong>1,163</strong></td>
</tr>
</tbody>
</table>

Notes: (1) This table is based on Figure 1 in the study under review. (2) Percentages may not equal 100 due to rounding.


After establishing and explaining the typology, the report goes on to describe differences in school types by size, demographic background of students, and performance on standardized tests. Most of these differences were predictable and obvious and do not provide new information. For example, vocational schools have lower test scores and enroll more low-income students.

A finding of interest is that most charter schools appear to have rather similar models and approaches to traditional public schools. Also, the average size of charter schools appears to be larger than expected, and several charter school types are as large or larger than the average traditional public school. Another interesting finding was that while the “Traditional” type of charter school performs better than other types in terms of absolute scores, the results are inverted when it came to gain scores. That is, the charter school types with the lowest absolute scores were more likely to show larger improvements over time. While these findings pique one’s interest, it is important to note that such differences are likely to be explained by other factors than the embedded differences among the charter school types. For example, schools with especially low test results can more easily show gains than schools whose results are already at or above state standards.

III. THE REPORT’S RATIONALES FOR ITS CONCLUSIONS AND FINDINGS

The report makes no strong conclusions and fairly reflects on many of the obvious limitations in the data and methodology used. As noted earlier, no substantial or sweeping conclusions are drawn from the findings.

One of the most valuable contributions is the new typology and the illustration it provides for examining charter schools using a typology. Typologies or matrices that are developed for analyzing information should reflect theoretical assumptions that are based in the literature or on a particular analytical framework. For this reason, typologies that have been used to analyze charter schools have varied considerably. For example, some typologies (or grouping of charters schools by type) have contrasted differences among charter schools using a wide array of typologies. Some of these are highlighted below with references to some of the studies that use these typologies.
• Management arrangements (operated by an Education Management Organization vs. non-Education Management Organization)3
• Facility types (cyber or virtual schools vs. brick-and-mortar schools)6
• Student learning types (college prep schools vs. schools that cater to at-risk populations)7
• Student demographics (schools with diverse populations vs. schools with homogeneous populations, based on race, class and/or ability)
• Start-up status (new start-ups versus public- or private-conversions)8
• Sponsor (state agency, leading education agencies (LEA), university, nonprofit, etc.)9
• Partnership types (public, nonprofit and for-profit)10
• Age of school (new schools vs. fully implemented)11
• Founding group (EMO, local groups, educators, parents, etc.)12

The list of examples above should provide insights and new ideas that the author of the study under review might consider in his research.

IV. REVIEW OF THE REPORT’S USE OF RESEARCH LITERATURE
It is claimed that this study is the first to create a charter school typology but, as illustrated in the previous section, this is not the case. This claim highlights one apparent weakness of this study: namely, that it lacks a review of relevant research and literature. While the study does provide us with a new typology, it is part of a growing trend in the use of typologies by researchers and evaluators who seek to understand differences among the schools as well as differences in performance. Common among the state evaluations are typologies that group charter schools by their age, start-up status, management arrangements, and grade level configurations. Some studies also have used typologies to understand when and how charter schools perform well, relative to traditional public schools.13

The study also erroneously claims that it is the first to compare different types of charter schools on standardized tests performance. Again, the body of research on this topic has grown substantially over the last five years and should have been considered, at least for providing a stronger analytical framework.14

V. REVIEW OF THE REPORT’S METHODOLOGY
There were a number of limitations in the design, methods, and data used. In addition to inherent limitations associated with the proposed design, the author introduced his own limitations by changing designs in the midst of the study, and by not thoroughly reporting on the measures and statistical techniques used. Below, some general concerns are raised regarding the study’s methodology.

Using the Right Measures and Statistics
The study describes differences in school size for each of the school types. The measure used is a mean enrollment. It would have been helpful to report standard deviations as well so that readers could understand how distinct and homogeneous the schools were within each school type. Also, a median score might provide a better or at least a supplemental measure, since some of the charter school types are likely to include extreme outliers such as the virtual schools that sometimes enroll several thousand students. In such cases, median enrollment...
would provide a better measure of differences in enrollments.

The study apparently uses cut scores in its analysis of student achievement, but this is not made clear in the narrative or in any of the tables or appendices. There is, however, mention of cut scores in the conclusion, so one must assume that “mean performance scores” refers to the average proportion of students meeting or exceeding state standards. In some of the states included in the study, individual student data or at least performance indices (the latter are based on gains made by students remaining in the schools over time) are readily available. These outcome measures would have been more sensitive to change over time, and would have better served the purpose of distinguishing school types in terms of performance.

The report includes a data table in Appendix B that lists mean performance scores by type and subject area. The actual measure being used was not identified and, as with the demographic differences, good practice would be to also report standard deviations. When reporting the broad findings on student performance, references were made to differences among schools types that were “big” or “small,” although no clear data were included to understand how big or small these differences are. Also, the author indicated that some differences were statistically significant; however, there was no indication of the statistical method used to determine significance. This is unacceptable for a research study. If the author wished to keep the narrative easy to read for a diverse audience, these technical details could have been included in endnotes or appendices.

Controlling for Extraneous Factors

The study claimed to control for the effect that the proportion of minority students or low-income students might have on results. No explanation or data were provided to indicate how the controls were made. Also, since the demographic comparisons in the report draw on data from 2001-2002, should one assume that the controls made for the performance data in 2003-2004 and 2004-2005 were based on demographic data from 2001-2002? Unfortunately, no details were provided regarding how the controls were made or the data sources used.

Applying a Consistent Design and Methodology

The typology was established and used to compare charter schools types in five states using data from 2001-2002. However, when it came to the analysis of student achievement data, a number of changes were made to the study’s design. For example, when switching from the comparison of size and demographics of the various school types to the actual performance of charter schools, a revised and further simplified typology was used. Moreover, different years are used for performance data than for demographic data.

In addition, one of the five states (Michigan) was dropped from the analysis of student performance because it was reported that the state did not collect achievement data with regularity. But if results were not obtainable for two consecutive years at subsequent grade levels, then it would have been possible to track differences across three years (e.g., from fourth grade results in 2002 to seventh grade results in 2005). In fact, such a spread in years may have provided a better growth trend than the one-year comparison made for the remaining four states.
VI. REVIEW OF THE VALIDITY OF FINDINGS AND CONCLUSIONS

A good and fair analysis includes testing and discounting alternative explanations for findings. This has not been done in this study. With each of the findings highlighted, it is possible to suggest a number of possible alternative explanations for the differences that are reported. The study’s main conclusion is that differences among the school types explain the differences in outcomes, but this is hard to confirm. For example, many of the differences are likely due to the types of students attracted to the schools rather than the particular characteristics of the ten school types. Unfortunately, little effort is devoted to identifying and discounting obvious sample bias or the fact that differences could be explained by factors other than school types.

For the following reasons, this study is not one that will be particularly useful for either researchers or policymakers: (1) the study is more exploratory than explanatory in nature, (2) no substantial conclusions are drawn from the data (in fact, very little is concluded), and (3) the study has substantial limitations, most of which were pointed out by the author himself.

Asking the Right Questions

A lot of hard work was obviously invested in categorizing the 1,163 schools in the typology matrix. This work of placing the schools in categories should assist in further analyses with these groups of schools, which may yield some important conclusions. Drawing conclusions, however, requires the researcher to ask the right questions of the data. For example, instead of only comparing charter schools to one another, he should compare them to their respective neighboring public schools. Learning that vocational charter schools are smaller than “Traditional” or “General” types of charter schools is not surprising. What would be interesting to know is whether vocational charter schools are relatively smaller or larger than vocational schools in the traditional public school sector.

Further, the fact that vocational charter schools have more minority and low-income students than other charter school types is not surprising. Similarly, the fact that vocational charter schools have lower absolute test scores than other charter school types is just as one might expect. The much more important question is, do vocational charter schools perform better than vocational schools in the traditional public school sector? Similarly, which types of charter schools perform better than comparable types of traditional public schools? Asking such questions would also help us to understand which types of charter schools may be doing harm to students by providing a lower-quality education than the students would have received at their neighboring traditional public school.

The findings that compare charter school types by percent minority and percent of students qualifying for free and reduced lunch also are hard to extract meaning from. What could be more revealing would be to learn the extent to which the schools differed from surrounding traditional public schools in terms of race and class. Are progressive charter schools more likely to enroll higher proportions of white or middle class students relative to neighboring public schools? Are vocational charter schools better able to serve a more diverse population relative to the surrounding community? Another obvious question that could be addressed with the data is: How does performance compare across states, especially since there are noticeable differences
in the charter school laws in the five participating states?

VII. THE REPORT'S USEFULNESS FOR GUIDANCE OF POLICY AND PRACTICE

The author stressed that his findings will be “just as important to policymakers and educators as the ‘horse race’ comparisons of charters against traditional public schools.” If the study told us how the different types of charter schools perform relative to similar traditional public schools, this would be something new and of importance.

Given that no surprising or clear conclusions were drawn, the study has very limited usefulness for policymakers. However, the study does a service by reminding us that typologies are helpful strategies to study and learn about charter schools. Nevertheless, the study is not—as the author suggested—the first to do this. While researchers and policy analysts may not find the particular typology elaborated in this study to be helpful, they should be inspired by the possible applications of typologies.

Here, is it worth noting that, while it is important to look for, be prepared to find, and understand differences among schools, or groups of schools, it is still sometimes important to consider aggregate results for all charter schools. This is because some research questions address common features of all charter schools, such as their autonomy to create their own governing boards and their greater freedom to hire and fire teachers. Similarly, the fact that all charter schools are funded using a quasi-market mechanism also means that comparisons across all charter schools can help us understand whether this approach is effective and useful.
NOTES & REFERENCES


2 By quantity of data I am referring to the increasing number of years of data and the increasing availability of data across more grades. The quality of the available data has also improved as better measures are used (e.g., scaled scores or percentile ranks in addition to cut scores) and as the amount of missing data for charter schools is gradually reduced.


This document is available on the Education Policy Studies Laboratory website at: http://www.asu.edu/educ/epsl/EPRU/ttreviews/EPSPS-0605-123-EPRU.pdf


13 See for example,


14 See the references in Endnote # 3.

15 When differences in performance were considered, the distinction in rows (see Table 1) was collapsed so the differences in performance by type is more likely to be explained by the differences in the students the distinct charter school types serve.

16 It is important to recall that vocational schools are largely serving students at the secondary level so differences in types be explained by differences between levels of provision rather than unique charter school types?

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